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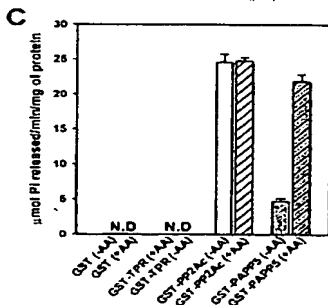
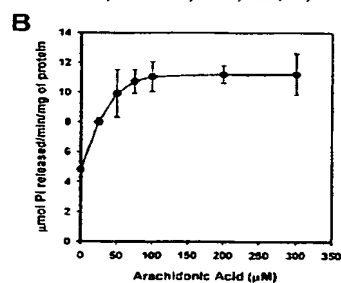
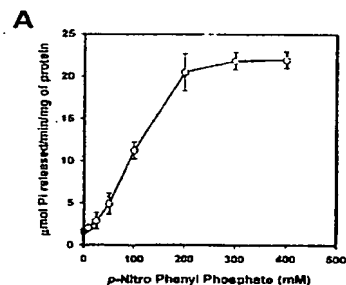
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27 February 2004 (27.02.2004) KR
- (71) Applicants (*for all designated States except US*):  
**GENOMINE INC.** [KR/KR]; Venture Bldg 306, Pohang  
Technopark, Pohang, Kyungsangbuk-do 790-834 (KR).  
**POSTECH FOUNDATION** [KR/KR]; #San 31, Hy-  
oja-dong, Nam-ku, Pohang, Kyungsangbuk-do 794-784  
(KR).
- (72) Inventors; and  
(75) Inventors/Applicants (*for US only*): **NAM, Hong-Gil**  
[KR/KR]; Gyosu Apt. #A-702, Jigok-dong, Nam-gu, Po-  
hang, Kyungsangbuk-do 790-390 (KR). **RYU, Jong-Sang**  
[KR/KR]; 5345 Taepyeong 1-dong, Sujong-gu, Seong-  
nam, Gyeonggi-do 461-191 (KR). **LIM, Pyung-Ok**  
[KR/KR]; Gyosu Apt. #4-902, Jigok-dong, Nam-gu, Po-  
hang, Kyungsangbuk-do 790-390 (KR). **KOO, Ja-Choon**  
[KR/KR]; 468-11 Hwagok 4-dong, Gangseo-gu, Seoul  
157-894 (KR).
- (74) Agent: **KIM, Seog-Hyun**; 9th Floor, Daekyung Building,  
120, 2-ka, Taepyeong-ro, Chung-ku, Seoul 100-724 (KR).
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[Continued on next page]

(54) Title: NOVEL PHYTOCHROME-INTERACTING PROTEIN AND A USE THEREOF



(57) Abstract: The present invention relates to a novel protein interacting with phytochromes and use thereof, and more particularly, to a polypeptide having either an amino acid sequence set forth in SEQ ID NO: 4 or an amino acid sequence having at least 70% with said amino acid sequence, and use thereof. The polypeptide interacts with phytochromes A and B, and the TPR domain present at the N-terminal region of the polypeptide is involved in the interaction. Also, a PP2A catalytic domain (PP2Ac) having phosphatase activity is present at the C-terminal region of the polypeptide. The polypeptide can be used as a phosphatase, and is useful in the production of plants sensitive to light signal transduction. Furthermore, the TPR domain present in the polypeptide is useful in the production of dwarf plants.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*